

By Tonya Lobbestael

The Commander Navy Reserve Force (CNRF) has a new Web site based on Microsoft's Content Management Server (CMS). The site was designed to consolidate over 550 Reserve Web sites scattered across the country. According to Microsoft, it is the largest Department of Defense (DoD) implementation of CMS.

SPAWAR Systems Center Charleston worked together with the Navy Reserve Force to field the new Web site and set out to solve a myriad of problems associated with the existing Web sites.

Can you imagine trying to search 550 individual Web sites for information or the cost of maintaining the hardware, software, security and training required to operate all of these sites? Ask Hank Winter, SPAWAR's System Architect and Program Manager for the new CMS System.

"We not only wanted to save the taxpayer money, we also wanted to make it easy for the Force to get information out onto the Web site easily." The Force now has a consolidated source of information or a "one-stop-shop" and presents a single organizational identity that helps both the public and the Navy Reservist.

With 550 individual Web sites making up the Reserve Force Web Enterprise, it was clear that a cost savings would be realized early on by consolidating security, search, labor, training and equipment. It is estimated that the Navy Reserve Force enjoys an annual cost savings of over \$9 million each year by using the new CMS system.

The Navy Reserve Web Site (NRWS) is a two-tiered public and private network that incorporates a public side that is accessible to anyone through the Internet and a private side that is accessible only to members of the Navy Reserve Force via a secure login.

The site has a capacity of supporting 3,000 commands and is currently supporting over 640 commands and 65,000 private subscribers. According to Winter, the site is busy. In the past six months, the site has logged over 640,000,000 page views.

"We are also trying to make it as easy as possible to access the site while maintaining a high security posture. Recently, we have added a Common Access Card (CAC) sign-in where users only have to present their CAC certificate to sign on to the site. The CAC PIN is easier to remember than complex passwords and difficult user IDs," says Winter.

The CMS was designed with each Navy Reserve Center and unit in mind. Each command has content authors and editors that create their own pages and content using common Navy Marine Corps Intranet (NMCI) desktop tools such as Microsoft Word. No programming or HTML skills are required. Users just cut, copy and paste into the online template.

The old way of doing business required that content owners rely on a webmaster to post their information. "There could be a significant bottleneck because users had to rely on a single individual to post the information. Sometimes, the interpretation of this information could be jumbled in the process," says Winter.

The current system has really empowered doctors, aviators and others to manage their content. There are also checks and balances because each command must have an editor who approves a page prior to posting and a command administrator who validates user accounts. Currently

there are about 1,200 authors and editors that update pages daily.

Capt. Mark Krause, the chief information officer for the CNRF, spearheaded the consolidation effort and outlined several significant requirements SPAWAR had to meet. First, the project had to be finished within four months, secondly, all 550 sites had to be consolidated.

Initially, Winter felt the task might be overwhelming because his team consists of himself and two contractors. "Having such a small team and a short delivery schedule pushed us to automate as much as possible and caused our thought processes to be more creative to save both labor and time. SSC Charleston initially had to architect the equipment, modify and develop software, and test and evaluate the NRWS to field it in such a short time frame," says Winter.

According to Winter, there were two keys to the successful launch of the site. Both contractors on the team, Luis Vega and Richard Floyd of CSSI Inc., are Microsoft Certified Application Developers and are trained to meet the development challenges that lay ahead. The other key was bringing Microsoft in as a consultant at the beginning of the project to assist with implementation of the CMS.

A major upgrade that included hardware and software upgrades, security enhancements and significant design changes was completed in May 2004. The site is hosted on a fault-tolerant server farm comprised of 18 servers and a Google Search Appliance.

The system now uses Microsoft's .NET Framework which allows future building of applications that can be tied into the CMS system. The Reserves also established a centralized help desk that is operated by reservists. SSC Charleston provides technical support. Future plans include moving the entire system to the NMCI within the next several years and to transfer responsibility for NRWS to the CNRF Web Services Team.

Ms. Lobbestal is the former editor of the SPAWAR Charleston Chronicle. Hank Winter is the SPAWAR System Architect and Program Manager for the CMS System. CHIPS